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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,744	11/18/2003	Gota Asano	MAT-8484US	5520
23122	7590	07/10/2007		
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			EXAMINER DOVE, TRACY MAE	
			ART UNIT 1745	PAPER NUMBER
			MAIL DATE 07/10/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/715,744	<b>Applicant(s)</b> ASANO, GOTA	
	<b>Examiner</b> Tracy Dove	<b>Art Unit</b> 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office Action is in response to the communication filed on 4/23/07. Applicant's arguments have been considered, but are not persuasive. Claims 1-10 are pending with claims 9 and 10 being withdrawn from consideration. This Action is made FINAL.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinaka et al., US 6,596,434 in view of admitted prior art in the specification (Figures 4a, 4b and top of page 11).

Yoshinaka teaches a cylindrical alkaline storage battery having a metallic case, a sealing plate for the metallic case and a spiral-shaped group of electrodes. The group of electrodes includes a positive electrode plate, a negative electrode plate and a separator. The sealing plate includes a cap-shaped terminal plate, which includes a cap part and a flange. A disc shaped filter is located on the underside of the flange. The disc shaped filter has a gas venting hole in its center. A space between the metallic case and the rims of the flange and of the filter is sealed with a gasket (abstract). An end part of the positive electrode plate is sticking out of the upper end of the negative electrode plate and connected to the bottom part of the filter (upper current collector) via the lead tab 9. A bottom end of the negative electrode is arranged to stick out of the bottom end of the positive electrode plate and is connected to the bottom part of the battery

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case via the lead tab 10 (6:24-32). A sealing agent such as asphalt may be applied between the flange 13b of the cap shaped terminal plate 13 and the filter 1 in order to resist leakage of electrolyte (8:10-19).

Yoshinaka does not explicitly teach a terminal of the upper collector is disposed through a hole in the center of a sealing plate. However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one of skill would have found the two piece terminal and sealing plate as shown in Figure 1 of the present invention obvious in view of the single piece terminal and sealing plate as shown in Figures 1-5 of Yoshinaka. The battery cap assembly of the claimed invention and the battery cap assembly of Yoshinaka are obvious variants and one of skill would reasonably expect them to function the same.

Regarding other elements of the claimed invention not specifically disclosed by Yoshinaka, Figures 4a and 4b in the present specification are admitted prior art. Furthermore, Applicant state "other structures are almost the same as those of the conventional alkaline storage battery".

\*

Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han, US 5,837,396 in view of admitted prior art in the specification (Figures 4a, 4b and top of page 11).

Han teaches a nickel metal hydride secondary battery (alkaline) having a cylindrically wound laminate comprising a positive electrode plate, a negative electrode plate and a separator plate interposed there between (1:12-15). As shown in Figure 2, the battery has a cap assembly 18 the covers an open end of the battery can. The cap assembly includes a upper collector

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having a hole for addition of electrolyte, a sealing plate having a cap shaped terminal that is adjacent the upper collector and a vent member. An electrode protrusion connects the electrode to a bottom surface of the upper collector.

Han does not explicitly teach a terminal of the upper collector is disposed through a hole in the center of a sealing plate. However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one of skill would have found the two piece terminal and sealing plate as shown in Figure 1 of the present invention obvious in view of the single piece terminal and sealing plate as shown in Figure 2 of Han. The battery cap assembly of the claimed invention and the battery cap assembly of Han are obvious variants and one of skill would reasonably expect them to function the same.

Regarding other elements of the claimed invention not specifically disclosed by Han, Figures 4a and 4b in the present specification are admitted prior art. Furthermore, Applicant states "other structures are almost the same as those of the conventional alkaline storage battery".

### ***Response to Arguments***

Applicant's arguments filed 4/23/07 have been fully considered but they are not persuasive.

Regarding Yoshinaka and the admitted prior art, Applicant argues the Examiner uses improper hindsight to make the obviousness rejection. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include

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knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The section of the specification that is relied upon by the Examiner is *admitted prior art*. Yoshinaka does not explicitly teach a terminal of the upper collector is disposed through a hole in the center of a sealing plate.

However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one of skill would have found the two piece terminal and sealing plate as shown in Figure 1 of the present invention obvious in view of the single piece terminal and sealing plate as shown in Figures 1-5 of Yoshinaka. The battery cap assembly of the claimed invention and the battery cap assembly of Yoshinaka are obvious variants and one of skill would reasonably expect them to function the same.

Regarding Han, Applicant argues the Examiner uses improper hindsight to make the obviousness rejection. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The section of the specification that is relied upon by the Examiner is *admitted prior art*. Han does not explicitly teach a terminal of the upper collector is disposed through a hole in the center of a sealing plate. However, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made because one of skill would have found the two piece terminal and

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sealing plate as shown in Figure 1 of the present invention obvious in view of the single piece terminal and sealing plate as shown in Figure 2 of Han. The battery cap assembly of the claimed invention and the battery cap assembly of Han are obvious variants and one of skill would reasonably expect them to function the same.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is 571-272-1285. The examiner can normally be reached on Monday-Thursday (9:00-7:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 6, 2007



TRACY DOVE  
PRIMARY EXAMINER